Serial No.: 10/780,795

Response to Final Office Action HBH Docket No.: 60046.0049USI1

# **REMARKS**

Claims 14, 16-21, 23, and 25-39 are pending in the present application. By this amendment, claims 14, 16-17, 21, 23, 25, 29-30, and 35 are amended, and claims 1-13, 15, 22, and 24 are canceled without prejudice or disclaimer. Furthermore, claims 36-39 are added. Applicant respectfully requests reconsideration of the present claims in view of the following remarks.

### I. Formal Matters

## Interview Summary

A telephonic interview occurred between Examiner Gilman and the undersigned, Jodi Hartman, on July 20, 2006. During the interview, Examiner Gilman and the undersigned discussed potential amendments to the claims, similar to those set forth above, which would likely overcome the rejections in view of the references cited.

# II. Claim Rejections

## **Double Patenting Rejection**

Claims 14-29 are rejected on the ground of nonstatutory double patenting over claims 1-9 of United States Patent No. 6,875,059 which, similar to the current patent application, is assigned to American Megatrends, Inc. Although Applicant respectfully traverses this rejection, in order to further prosecution of this application, please find included with this response a terminal disclaimer to overcome the nonstatutory double patenting rejection of claims 14-29. Since a terminal disclaimer and appropriate fee were included with the response mailed on July 5, 2006, an additional terminal disclaimer fee is not being included with this response. Withdrawal of this rejection is respectfully requested.

## Claim Rejections Under 35 U.S.C. §102(b)

Claims 1-2 are rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 6,160,728 to Peterson et al. (hereinafter "Peterson"). As discussed above, claims 1-2 are canceled without prejudice or disclaimer rendering this rejection moot with regard to claims 1-2.

Claims 3-6

Claims 3-6 are rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson in

view of United States Patent No. 5,563,782 to Chen et al. (hereinafter "Chen"). As noted above,

claims 3-6 are canceled without prejudice or disclaimer rendering this rejection moot with regard

to claims 3-6.

Claims 7-10

Claims 7-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson in

view of United States Patent No. 5,907,197 to Faulk (hereinafter "Faulk"). As discussed above,

claims 7-10 are canceled without prejudice rendering this rejection moot with regard to claims 7-

10.

Claims 11 and 13

Claims 11 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over

Peterson in view of United States Patent No. 5,910,750 to Harada et al. (hereinafter "Harada") or

Peterson in view of United States Patent No. 6,664,758 to Yang (hereinafter "Yang"). As noted

above, claims 11 and 13 are canceled without prejudice or disclaimer rendering this rejection

moot with regard to claims 11 and 13.

Claim 12

Claim 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson in view

of Harada and further in view of United States Patent No. 5,961,619 to Voloshin (hereinafter

"Voloshin"). As discussed above, claim 12 is canceled without prejudice or disclaimer rendering

this rejection moot with regard to claim 12.

Claims 14 and 22

Claims 14 and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over

Peterson in view of Harada or, alternatively, over Peterson in view of Yang. This rejection is

respectfully traversed. As noted above, claim 22 is canceled without prejudice or disclaimer

rendering this rejection moot with regard to claim 22.

8

HBH Docket No.: 60046.0049USI1

As amended, claim 14 recites that an apparatus for providing power to one or more devices comprises an integrated power output cord connected in series to the integrated power input connector, the integrated power output cord configured to mate directly with a power input connector on a first powered device to provide alternating current to the first powered device; a power supply mounted within the housing, the power supply connected in parallel to the power input connector and operative to generate direct current for delivery to at least a second powered device; a cable assembly extending from the housing, the cable assembly connected to an output of the power supply and operative to deliver the direct current to the second powered device; and a control circuit mounted within the housing, the circuit operative to receive an input signal from the second device powered by the direct current of the power supply and, based on the input signal, to allow or prevent the flow of the alternating current to the integrated power output cord.

Peterson does not teach or suggest an apparatus for providing power to one or more devices as recited by claim 14. On the contrary, Peterson describes a dual mode alternating current/constant-voltage (AC/DC) electrical receptacle having input terminals for receiving AC, an AC-to-DC converter that generates the low-voltage DC from the high-voltage AC, one or more DC output sockets to provide the low-voltage DC, and a standard AC socket that provides the high voltage AC. Alternatively, Peterson describes a dual mode AC/DC electrical receptacle having input terminals for receiving AC and DC and output sockets for AC and DC such that the AC and DC are simply passed through the electrical receptacle. Neither of these embodiments described by Peterson is analogous to the apparatus recited by claim 14 because Peterson fails to teach, suggest, or describe that the electrical receptacle includes an integrated power output cord. Instead, Peterson describes that the electrical receptacle includes a DC output socket and a standard AC socket, without teaching or suggesting that either socket is an integrated power output cord.

Peterson also fails to teach, suggest, or describe that the electrical receptacle includes a cable assembly connected to an output of the power supply and extending from the receptacle operative to deliver the DC to a powered device. Instead, Peterson describes that the electrical receptacle includes a DC output socket, without teaching or suggesting that the DC output socket is a cable assembly extending from the receptacle.

Moreover, the teaching of Peterson is not analogous to the apparatus recited by claim 14 because Peterson fails to teach, suggest, or describe that the electrical receptacle includes a

Serial No.: 10/780,795 Response to Final Office Action HBH Docket No.: 60046.0049US11

control circuit operative to receive an input signal from a device powered by the DC of the AC-to-DC converter and, based on the input signal, allow or prevent the flow of AC to the AC socket based on the input signal. In fact, Peterson does not mention any means for allowing or preventing the flow of AC to the AC socket or any means for receiving a control signal from a device powered by the AC-to-DC converter or any other source.

The Office Action notes that Peterson does not disclose the recitation of a control circuit and relies on the teaching of Harada to allegedly cure the deficiencies of the teaching of Peterson. However, like Peterson, Harada does not teach, suggest, or describe an apparatus for providing power to one or more devices as recited by claim 14. In contrast, Harada describes a control device for reducing power consumption while an electronic device is inactivated including an AC adapter for converting power voltage to a predetermined DC voltage and a battery, both for supplying voltage to a functional circuit such as a PC or a cellular phone. Harada describes that the DC voltage from the AC adapter and battery is supplied to the functional circuit via a DC/DC converter which converts the received DC voltage from the AC adapter and battery to a proper DC voltage before supplying the DC voltage to the functional circuit. Harada further describes that voltage from the AC adapter and battery is supplied to the DC/DC converter via a switch circuit having a switch and a main switch. Harada also describes that the switch circuit is further connected to a control circuit.

When the switch of the switch circuit is turned on, Harada describes that the switch circuit becomes conductive and a start signal is sent to the control circuit, which determines whether the start signal is at a voltage higher than a predetermined voltage. If the control circuit determines that the start signal is at a higher voltage, then Harada describes that the control circuit judges that the functional circuit should be activated and outputs a command signal to activate the DC/DC converter. Simultaneously, Harada describes that the control circuit sends an actuating signal to the switch circuit which renders the main switch of the switch circuit conductive, allowing the DC voltage from the AC adapter and battery to be supplied to the DC/DC converter and, in turn, DC from the DC/DC converter supplied to the functional circuit. On the other hand, Harada describes that if the control circuit determines that the start signal is not at a higher voltage than a predetermined voltage, then the control circuit judges that there is no need to start the functional circuit and does not output a command signal for activating the DC/DC converter. Thus, DC from the DC/DC converter is not supplied to the functional circuit.

HBH Docket No.: 60046.0049USI1

This is not analogous to the apparatus recited by claim 14 because Harada fails to teach, suggest, or describe that the control device includes an integrated power output cord to provide AC to the functional circuit. In fact, Harada fails to teach, suggest, or describe any means for delivering AC to a powered device. Harada also fails to teach, suggest, or describe that the control device includes a cable assembly connected to an output of the AC adapter or battery and extending from the device operative to deliver DC to a powered device.

Further, the teaching of Harada is not analogous to the apparatus recited by claim 14 because Harada fails to teach, suggest, or describe that the control circuit is operative to receive an input signal from a device powered by DC from the power circuit of the control device and, based on the input signal, to allow or prevent flow of AC to the functional circuit. Instead, Harada describes that the control circuit may receive a signal in response to a user turning on a switch or in response to the AC adapter being connected and, if the signal is at a voltage higher than a predetermined voltage, then the control circuit forces the main switch of the switch circuit to a conductive state such that DC from the AC adapter or battery is received by the DC/DC converter. Neither the switch turned on by a user nor the AC adapter is powered by DC from the power circuit of the control device.

Moreover, Harada fails to teach, suggest, or describe that the control circuit is operative to allow or prevent the flow of alternating current (AC) to the DC/DC converter. Instead, Harada describes that the control circuit is operative to allow and prevent the flow of DC to the DC/DC converter, without suggesting that the control circuit is operative to control the flow of AC to the DC/DC converter. In fact, Harada fails to teach or suggest any selectable control over a flow of AC because the flow received from both the AC adapter and the battery is DC.

Alternatively, the Office Action relies on the teaching of Yang to allegedly cure the above-identified deficiencies of the teaching of Peterson. However, like Peterson and Harada, Yang does not teach or suggest an apparatus for providing power to one or more devices as recited by claim 14. On the contrary, Yang describes a universal power adapter having a DC voltage converter adapted to convert input current into the desired voltage level and then transmit the voltage-converted input current to a power/signal jack which connects to a charging connector. Yang further describes that the universal power adapter includes a feedback control voltage output circuit which receives a voltage feedback parameter from the charging connector

HBH Docket No.: 60046.0049USI1

and drives the DC voltage converter to output a predetermined voltage based on the voltage feedback parameter.

This is not analogous to the apparatus recited by claim 14 because Yang fails to teach, suggest, or describe that the universal power adapter includes an integrated power output cord to provide alternating current (AC) to an electronic product. Instead, Yang describes that the universal power adapter includes a power/signal jack which transmits DC to an electronic product, without suggesting that the universal power adapter includes an integrated output cord to provide AC to an electronic product.

Moreover, the teaching of Yang is not analogous to the apparatus recited by claim 14 because Yang fails to teach, suggest, or describe that the feedback control voltage output circuit is operative to allow or prevent the flow of power to the charging connector. Instead, Yang describes that the feedback control voltage circuit can convert the voltage of the power provided to the charging connector, without teaching or suggesting that the feedback control voltage circuit can allow or prevent the flow of power to the charging circuit.

Yang also fails to teach, suggest, or describe that the feedback control voltage output circuit is operative to allow or prevent the flow of AC to the charging connector. Instead, Yang describes that the feedback control voltage output circuit is operative to drive the DC voltage converter to output a predetermined DC voltage, without suggesting that the feedback control voltage output circuit is operative to allow or prevent the flow of AC to the charging connector.

Furthermore, Applicant submits that one of ordinary skill, knowing Peterson's dual-mode electrical receptacle, Harada's power-reduction control device, and Yang's power adapter, would not see any obvious way to combine those teachings to any practical effect, and in particular to produce the claimed apparatus. Each of the references discloses dissimilar devices having different purposes and operating in different ways. Peterson's dual-mode receptacle makes AC power and low-voltage DC power available at the same time, and at a common receptacle. Peterson has no need and provides no suggestion for preventing the flow of either the low-voltage DC or the standard-voltage AC to the respective sockets. Harada's power-reduction control device can only deliver and prevent the delivery of DC power, and Yang's power adapter can only deliver and convert the voltage of DC power being delivered, without being able to prevent the delivery of the DC power.

Merely finding a "control circuit" in Harada or in Yang, and asserting the incorporation of that control circuit into the teachings of Peterson, does not result in the Applicant's apparatus. Accordingly, an apparatus having the overall combination of structural and functional elements set forth in claim 14 would not have been obvious to one of ordinary skill at the time of making the present invention.

For at least these reasons, claim 14 is allowable over the combined teaching of Peterson and Harada as well as the combined teaching of Peterson and Yang. Accordingly, withdrawal of these rejections is respectfully requested.

#### Claims 15-16 and 20-21

Claims 15-16 and 20-21 are rejected under 35 U.S.C. §103(a) over Peterson in view of Faulk. Applicant respectfully traverses this rejection. As noted above, claim 15 is canceled without prejudice or disclaimer rendering this rejection moot with regard to claim 15.

For at least the reasons given above, claim 14 is allowable over the combined teaching of Peterson and Harada as well as the combined teaching of Peterson and Yang. Since claims 16 and 20-21 depend from claim 14 and recite further claim features, Applicant respectfully submits that the combined teaching of Peterson and Faulk does not make obvious Applicant's claimed invention as embodied in claims 16 and 20-21. In particular, Faulk does not overcome the aforementioned deficiencies of the combined teaching of Peterson and Harada or the combined teaching of Peterson and Yang, nor was Faulk cited for that purpose. Accordingly, withdrawal of these rejections is respectfully requested.

### **Claims 17-19**

Claims 17-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson in view of Harada and further in view of Voloshin. This rejection is respectfully traversed.

For at least the reasons given above, claim 14 is allowable over the combined teaching of Peterson and Harada and the combined teaching of Peterson and Yang. Since claims 17-19 depend from claim 14 and recite further claim features, Applicant respectfully submits that the combined teaching of Peterson, Harada, and Voloshin does not make obvious Applicant's claimed invention as embodied in claims 17-19. In particular, Voloshin does not overcome the

HBH Docket No.: 60046.0049USII

aforementioned deficiencies of the combined teaching of Peterson and Harada. Accordingly, withdrawal of these rejections is respectfully requested.

#### Claim 23

Claim 23 is rejected under 35 U.S.C §103(a) as being unpatentable over Peterson in view of Harada or Peterson in view of Yang. Applicant respectfully traverses this rejection.

As amended, claim 23 recites that an apparatus for providing power to one or more devices comprises an integrated power output connector connected in series to the integrated power input connector, the integrated power output connector configured to mate directly with a power input connector on a first powered device to provide alternating current to the first powered device; a power supply mounted within the housing, the power supply connected in parallel to the power input connector and operative to generate direct current for delivery to at least a second powered device; a cable assembly extending from the housing, the cable assembly connected to an output of the power supply and operative to deliver the direct current to the second powered device; and a control circuit mounted within the housing, the circuit operative to receive an input signal from the second device powered by the direct current of the power supply and receive power from the power supply, and based on the input signal, to allow or prevent the flow of the alternating current to the integrated power output connector.

Peterson does not teach or suggest an apparatus for providing power to one or more devices as recited by claim 23. On the contrary, Peterson describes a dual mode AC/DC electrical receptacle having input terminals for receiving AC, an AC-to-DC converter that generates the low-voltage DC from the high-voltage AC, one or more DC output sockets to provide the low-voltage DC, and a standard AC socket that provides the high voltage AC. Alternatively, Peterson describes a dual mode AC/DC electrical receptacle having input terminals for receiving AC and DC and output sockets for AC and DC such that the AC and DC are simply passed through the electrical receptacle. Neither of these embodiments described by Peterson is analogous to the apparatus recited by claim 23 because Peterson fails to teach, suggest, or describe that the electrical receptacle includes a cable assembly connected to an output of the power supply and extending from the receptacle operative to deliver the DC to a powered device. Instead, Peterson describes that the electrical receptacle includes a DC output

Serial No.: 10/780,795 Response to Final Office Action HBH Docket No.: 60046.0049USI1

socket, without teaching or suggesting that the DC output socket is a cable assembly extending from the receptacle.

Moreover, the teaching of Peterson is not analogous to the apparatus recited by claim 23 because Peterson fails to teach, suggest, or describe that the electrical receptacle includes a control circuit operative to receive an input signal from a device powered by the DC of the ACto-DC converter and, based on the input signal, allow or prevent the flow of AC to the AC socket based on the input signal. In fact, Peterson does not mention any means for allowing or preventing the flow of AC to the AC socket or any means for receiving a control signal from a device powered by the AC-to-DC converter or any other source.

The Office Action notes that Peterson does not disclose the recitation of a control circuit and relies on the teaching of Harada to allegedly cure the deficiencies of the teaching of Peterson. However, like Peterson, Harada does not teach or suggest an apparatus for providing power to one or more devices as recited by claim 23. In contrast, Harada describes a control device for reducing power consumption while an electronic device is inactivated including an AC adapter for converting power voltage to a predetermined DC voltage and a battery, both for supplying voltage to a functional circuit such as a PC or a cellular phone. Harada describes that the DC voltage from the AC adapter and battery is supplied to the functional circuit via a DC/DC converter which converts the received DC voltage from the AC adapter and battery to a proper DC voltage before supplying the DC voltage to the functional circuit. Harada further describes that voltage from the AC adapter and battery is supplied to the DC/DC converter via a switch circuit having a switch and a main switch. Harada also describes that the switch circuit is further connected to a control circuit.

When the switch of the switch circuit is turned on, Harada describes that the switch circuit becomes conductive and a start signal is sent to the control circuit, which determines whether the start signal is at a voltage higher than a predetermined voltage. If the control circuit determines that the start signal is at a higher voltage, then Harada describes that the control circuit judges that the functional circuit should be activated and outputs a command signal to activate the DC/DC converter. Simultaneously, Harada describes that the control circuit sends an actuating signal to the switch circuit which renders the main switch of the switch circuit conductive, allowing the DC voltage from the AC adapter and battery to be supplied to the DC/DC converter. On the other hand, Harada describes that if the control circuit determines that

HBH Docket No.: 60046.0049USI1

the start signal is not at a higher voltage than a predetermined voltage, then the control circuit judges that there is no need to start the functional circuit and does not output a command signal for activating the DC/DC converter.

This is not analogous to the apparatus recited by claim 23 because Harada fails to teach, suggest, or describe that the control device includes an integrated power output connector to provide AC to the functional circuit. In fact, Harada fails to teach, suggest, or describe any means for delivering AC to a powered device. Harada also fails to teach, suggest, or describe that the control device includes a cable assembly connected to an output of the AC adapter or battery and extending from the device operative to deliver DC to a powered device.

Moreover, the teaching of Harada is not analogous to the apparatus recited by claim 23 because Harada fails to teach, suggest, or describe that the control circuit is operative to receive an input signal from a device powered by DC from the power circuit of the control device and, based on the input signal, to allow or prevent the flow of AC to the functional circuit. Instead, Harada describes that the control circuit may receive a signal in response to a user turning on a switch or in response to the AC adapter being connected and, if the signal is at a voltage higher than a predetermined voltage, then the control circuit forces the main switch of the switch circuit to a conductive state such that DC from the AC adapter or battery is received by the DC/DC converter. Neither the switch turned on by a user nor the AC adapter is powered by DC from the power circuit of the control device.

Moreover, Harada fails to teach, suggest, or describe that the control circuit is operative to allow or prevent the flow of alternating current (AC) to the DC/DC converter. Instead, Harada describes that the control circuit is operative to allow and prevent the flow of DC to the DC/DC converter, without suggesting that the control circuit is operative to control the flow of AC to the DC/DC converter. In fact, Harada fails to teach or suggest any selectable control over a flow of AC because the flow received from both the AC adapter and the battery is DC.

Alternatively, the Office Action relies on the teaching of Yang to allegedly cure the above-identified deficiencies of the teaching of Peterson. However, like Peterson and Harada, Yang does not teach or suggest an apparatus for providing power to one or more devices as recited by claim 23. On the contrary, Yang describes a universal power adapter having a DC voltage converter adapted to convert input current into the desired voltage level and then transmit the voltage-converted input current to a power/signal jack which connects to a charging

HBH Docket No.: 60046.0049USI1

connector. Yang further describes that the universal power adapter includes a feedback control voltage output circuit which receives a voltage feedback parameter from the charging connector and drives the DC voltage converter to output a predetermined voltage based on the voltage feedback parameter.

This is not analogous to the apparatus recited by claim 23 because Yang fails to teach, suggest, or describe that the universal power adapter includes an integrated power output connector to provide alternating current (AC) to an electronic product. Instead, Yang describes that the universal power adapter includes a power/signal jack which transmits DC to an electronic product, without suggesting that the universal power adapter includes an integrated power output connector to provide AC to an electronic product.

Further, the teaching of Yang is not analogous to the apparatus recited by claim 23 because Yang fails to teach, suggest, or describe that the feedback control voltage output circuit is operative to allow or prevent the flow of power to the charging connector. Instead, Yang describes that the feedback control voltage circuit can convert the voltage of the power provided to the charging connector, without teaching or suggesting that the feedback control voltage circuit can allow or prevent the flow of power to the charging circuit.

Yang also fails to teach, suggest, or describe that the feedback control voltage output circuit is operative to allow or prevent the flow of alternating current (AC) to the charging connector. Instead, Yang describes that the feedback control voltage output circuit is operative to drive the DC voltage converter to output a predetermined DC voltage, without suggesting that the feedback control voltage output circuit is operative to allow or prevent the flow of AC to the charging connector.

Furthermore, Applicant submits that one of ordinary skill, knowing Peterson's dual-mode electrical receptacle, Harada's power-reduction control device, and Yang's power adapter, would not see any obvious way to combine those teachings to any practical effect, and in particular to produce the claimed apparatus. Each of the references discloses dissimilar devices having different purposes and operating in different ways. Peterson's dual-mode receptacle makes AC power and low-voltage DC power available at the same time, and at a common receptacle. Peterson has no need and provides no suggestion for preventing the flow of either the low-voltage DC or the standard-voltage AC to the respective sockets. Harada's power-reduction control device can only deliver and prevent the delivery of DC power, and Yang's power adapter

HBH Docket No.: 60046.0049USI1

can only deliver and convert the voltage of DC power being delivered, without being able to

prevent the delivery of the DC power.

Merely finding a "control circuit" in Harada or in Yang, and asserting the incorporation of that control circuit into the teachings of Peterson, does not result in the Applicant's apparatus.

Accordingly, an apparatus having the overall combination of structural and functional elements

set forth in claim 23 would not have been obvious to one of ordinary skill at the time of making

the present invention. For at least these reasons, claim 23 is allowable over the combined

teaching of Peterson and Harada as well as the combined teaching of Peterson and Yang.

Claims 24 and 27-28

Claims 24 and 27-28 are rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson in view of Faulk. This rejection is respectfully traversed. As noted above, claim 24 is

canceled without prejudice or disclaimer rendering this rejection moot with regard to claim 24.

For at least the reasons given above, claim 23 is allowable over the combined teaching of

Peterson and Harada as well as the combined teaching of Peterson and Yang. Since claims 27-

28 depend from claim 23 and recite further claim features, Applicant respectfully submits that

the combined teaching of Peterson and Faulk does not make obvious Applicant's claimed

invention as embodied in claims 27-28. In particular, Faulk does not overcome the

aforementioned deficiencies of the combined teaching of Peterson and Harada or the combined

teaching of Peterson and Yang, nor was Faulk cited for that purpose. Accordingly, withdrawal

of these rejections is respectfully requested.

**Claims 25-26** 

Claims 25-26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson

in view of Harada and further in view of Voloshin. Applicant respectfully traverses this

rejection.

For at least the reasons given above, claim 23 is allowable over the combined teaching of

Peterson and Harada. Since claims 25-26 depend from claim 23 and recite further claim

features, Applicant respectfully submits that the combined teaching of Peterson, Harada, and

Voloshin does not make obvious Applicant's claimed invention as embodied in claims 25-26. In

particular, Voloshin does not overcome the aforementioned deficiencies of the combined

18

HBH Docket No.: 60046.0049USI1

teaching of Peterson and Harada. Accordingly, withdrawal of these rejections is respectfully requested.

### Claims 29 and 35

Claims 29 and 35 are rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson in view of Harada or, alternatively, over Peterson in view of Yang. This rejection is respectfully traversed.

As amended, claim 29 recites that an apparatus for providing power to one or more devices comprises a power supply mounted within the housing, the power supply connected in parallel to the power input connector and operative to generate direct current for delivery to at least a second powered device; and a control circuit mounted within the housing, the circuit operative to receive an input signal having only a high or low value from the second device powered by the direct current of the power supply and receive power from the power supply, and based on whether the input signal has a high or low value, to allow or prevent the flow of alternating current to the integrated power output cord.

Peterson does not teach or suggest an apparatus for providing power to one or more devices as recited by claim 29. On the contrary, as discussed above, Peterson describes a dual mode alternating current/constant-voltage (AC/DC) electrical receptacle having input terminals for receiving AC, an AC-to-DC converter that generates the low-voltage DC from the high-voltage AC, one or more DC output sockets to provide the low-voltage DC, and a standard AC socket that provides the high voltage AC. Alternatively, Peterson describes a dual mode AC/DC electrical receptacle having input terminals for receiving AC and DC and output sockets for AC and DC such that the AC and DC are simply passed through the electrical receptacle. Neither of these embodiments described by Peterson is analogous to the apparatus recited by claim 29 because Peterson fails to teach, suggest, or describe that the electrical receptacle includes a control circuit operative to receive an input signal from a device powered by the DC of the AC-to-DC converter and, based on the input signal, allow or prevent the flow of AC to the AC socket based on the input signal. In fact, Peterson does not mention any means for allowing or preventing the flow of AC to the AC socket or any means for receiving a control signal from a device powered by the AC-to-DC converter or any other source.

Serial No.: 10/780,795 Response to Final Office Action HBH Docket No.: 60046.0049USI1

The Office Action notes that Peterson does not disclose the recitation of a control circuit

and relies on the teaching of Harada to allegedly cure the deficiencies of the teaching of Peterson. However, like Peterson, Harada does not teach or suggest an apparatus for providing power to one or more devices as recited by claim 29. In contrast, Harada describes a control device for reducing power consumption while an electronic device is inactivated including an AC adapter for converting power voltage to a predetermined DC voltage and a battery, both for supplying voltage to a functional circuit such as a PC or a cellular phone. Harada describes that the DC voltage from the AC adapter and battery is supplied to the functional circuit via a DC/DC converter which converts the received DC voltage from the AC adapter and battery to a proper DC voltage before supplying the DC voltage to the functional circuit. Harada further describes that voltage from the AC adapter and battery is supplied to the DC/DC converter via a switch

circuit having a switch and a main switch. Harada also describes that the switch circuit is further

connected to a control circuit.

When the switch of the switch circuit is turned on, Harada describes that the switch circuit becomes conductive and a start signal is sent to the control circuit, which determines whether the start signal is at a voltage higher than a predetermined voltage. If the control circuit determines that the start signal is at a higher voltage, then Harada describes that the control circuit judges that the functional circuit should be activated and outputs a command signal to activate the DC/DC converter. Simultaneously, Harada describes that the control circuit sends an actuating signal to the switch circuit which renders the main switch of the switch circuit conductive, allowing the DC voltage from the AC adapter and battery to be supplied to the DC/DC converter. On the other hand, Harada describes that if the control circuit determines that the start signal is not at a higher voltage than a predetermined voltage, then the control circuit judges that there is no need to start the functional circuit and does not output a command signal for activating the DC/DC converter.

This is not analogous to the apparatus recited by claim 29 because Harada fails to teach, suggest, or describe that the control circuit is operative to receive an input signal from a device powered by DC from the power circuit of the control device and, based on the input signal, to allow or prevent flow of AC to the functional circuit. Instead, Harada describes that the control circuit may receive a signal in response to a user turning on a switch or in response to the AC adapter being connected and, if the signal is at a voltage higher than a predetermined voltage,

HBH Docket No.: 60046.0049USI1

then the control circuit forces the main switch of the switch circuit to a conductive state such that DC from the AC adapter or battery is received by the DC/DC converter. Neither the switch turned on by a user nor the AC adapter is powered by DC from the power circuit of the control device.

Moreover, Harada fails to teach, suggest, or describe that the control circuit is operative to allow or prevent the flow of alternating current (AC) to the DC/DC converter. Instead, Harada describes that the control circuit is operative to allow and prevent the flow of *DC* to the DC/DC converter, without suggesting that the control circuit is operative to control the flow of *AC* to the DC/DC converter. In fact, Harada fails to teach or suggest any selectable control over a flow of AC because the flow received from both the AC adapter and the battery is DC.

Alternatively, the Office Action relies on the teaching of Yang to allegedly cure the above-identified deficiencies of the teaching of Peterson. However, like Peterson and Harada, Yang does not teach or suggest an apparatus for providing power to one or more devices as recited by claim 29. On the contrary, Yang describes a universal power adapter having a DC voltage converter adapted to convert input current into the desired voltage level and then transmit the voltage-converted input current to a power/signal jack which connects to a charging connector. Yang further describes that the universal power adapter includes a feedback control voltage output circuit which receives a voltage feedback parameter from the charging connector and drives the DC voltage converter to output a predetermined voltage based on the voltage feedback parameter.

This is not analogous to the apparatus recited by claim 29 because Yang fails to teach, suggest, or describe that the feedback control voltage output circuit is operative to allow or prevent the flow of power to the charging connector. Instead, Yang describes that the feedback control voltage circuit can convert the voltage of the power provided to the charging connector, without teaching or suggesting that the feedback control voltage circuit can allow or prevent the flow of power to the charging circuit.

Yang also fails to teach, suggest, or describe that the feedback control voltage output circuit is operative to allow or prevent the flow of alternating current (AC) to the charging connector. Instead, Yang describes that the feedback control voltage output circuit is operative to drive the DC voltage converter to output a predetermined *DC* voltage, without suggesting that

HBH Docket No.: 60046.0049USI1

the feedback control voltage output circuit is operative to allow or prevent the flow of AC to the charging connector.

Furthermore, Applicant submits that one of ordinary skill, knowing Peterson's dual-mode electrical receptacle, Harada's power-reduction control device, and Yang's power adapter, would not see any obvious way to combine those teachings to any practical effect, and in particular to produce the claimed apparatus. Each of the references discloses dissimilar devices having different purposes and operating in different ways. Peterson's dual-mode receptacle makes AC power and low-voltage DC power available at the same time, and at a common receptacle. Peterson has no need and provides no suggestion for preventing the flow of either the low-voltage DC or the standard-voltage AC to the respective sockets. Harada's power-reduction control device can only deliver and prevent the delivery of DC power, and Yang's power adapter can only deliver and convert the voltage of DC power being delivered, without being able to prevent the delivery of the DC power.

Merely finding a "control circuit" in Harada or in Yang, and asserting the incorporation of that control circuit into the teachings of Peterson, does not result in the Applicant's apparatus. Accordingly, an apparatus having the overall combination of structural and functional elements set forth in claim 29 would not have been obvious to one of ordinary skill at the time of making the present invention.

For at least the reasons given above, claim 29 is allowable over the combined teaching of Peterson and Harada as well as the combined teaching of Peterson and Yang. Since claim 35 depends from claim 29 and recites further claim features, Applicant respectfully submits that the combined teaching of Peterson and Harada as well as the combined teaching of Peterson and Yang do not make obvious Applicant's claimed invention as embodied in claim 29 for at least these reasons. Accordingly, withdrawal of these rejections is respectfully requested.

#### Claims 30 and 33-34

Claims 30 and 33-34 are rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson in view of Faulk. This rejection is respectfully traversed.

For at least the reasons given above, claim 29 is allowable over the combined teaching of Peterson and Harada as well as the combined teaching of Peterson and Yang. Since claims 30 and 33-34 depend from claim 29 and recite further claim features, Applicant respectfully submits

that the combined teaching of Peterson and Faulk does not make obvious Applicant's claimed

invention as embodied in claims 30 and 33-34. In particular, Faulk does not overcome the

aforementioned deficiencies of the combined teaching of Peterson and Harada or the combined

teaching of Peterson and Yang, nor was Faulk cited for that purpose. Accordingly, withdrawal

of these rejections is respectfully requested.

**Claims 31-32** 

Claim 31-32 are rejected under 35 U.S.C. §103(a) as being unpatentable over Peterson in

view of Harada and further in view of Voloshin. Applicant respectfully traverses this rejection.

For at least the reasons given above, claim 29 is allowable over the combined teaching of

Peterson and Harada. Since claims 31-32 depend from claim 29 and recite further claim

features, Applicant respectfully submits that the combined teaching of Peterson, Harada, and

Voloshin does not make obvious Applicant's claimed invention as embodied in claims 31-32. In

particular, Voloshin does not overcome the aforementioned deficiencies of the combined

teaching of Peterson and Harada. Accordingly, withdrawal of these rejections is respectfully

requested.

III. New Claims 36-39

New claims 36-39 are directed to further embodiments of the Applicant's claimed

invention originally set forth in claims 3-6 which are canceled without prejudice or disclaimer by

this amendment.

For at least the reasons discussed above, independent claim 14 is allowable over the

combined teaching of Peterson and Harada as well as the combined teaching of Peterson and

Yang. Since new claims 36-39 depend from claim 14 and recite further claim features,

Applicant respectfully submits that the combined teaching of Peterson and Harada as well as the

combined teaching of Peterson and Yang do not make obvious Applicant's claimed invention as

embodied in claims 36-39 for at least these reasons.

23

HBH Docket No.: 60046.0049USI1

# **CONCLUSION**

For at least these reasons, Applicant asserts that the pending claims 14, 16-21, 23, and 25-39 are in condition for allowance. Applicant further asserts that this response addresses each and every point of the final Office Action, and respectfully requests that the Examiner pass this application with claims 14, 16-21, 23, and 25-39 to allowance. Should the Examiner have any questions, please contact Applicant's attorney at 404.522.1100.

Respectfully submitted,

HOPE BALDAUFF HARTMAN, LLC

Date: September 5, 2006

Jodi I/. Hartman Reg./No. 55,251

Hope Baldauff Hartman, LLC P.O. Box 2825 Atlanta, Georgia 30301 Telephone: 404.522.1100

53377
PATENT TRADEMARK OFFICE